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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,242	01/19/2005	Eleanor Bernice Ridley	CO00022715	6482
324 7590 09/08/2010 BASF Corporation Patent Department 500 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			EXAMINER ROGERS, JAMES WILLIAM	
			ART UNIT 1618	PAPER NUMBER
			NOTIFICATION DATE 09/08/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/523,242

Applicant(s)

RIDLEY ET AL.

Examiner

JAMES W. ROGERS

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/14/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI.08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Interval Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicants amendments to the claims filed 07/14/2010 have been entered. Any objection/rejection from the previous office action filed 02/01/2010 not addressed below has been withdrawn.

Response to Amendment

The declaration under 37 CFR 1.132 filed 07/14/2010 is insufficient to overcome the rejection of claims 1-9 and 11-17 based upon the 35 U.S.C. 103(a) rejection over Green, Galleguillos and Lentine as set forth in the last Office action. The examples show polymer 2 (dimethacrylamide, inventive example) having a higher fluorescent activity on hair follicles than polymer 1 (acrylamide) in figure 2, which is said to show an increase of deposition of polymer 2 on the hair follicle. The examiner does not believe selecting an acrylamide polymer that shows the most deposition on hair for a hair care product to be unexpected; instead it seems to be normal and routine experimentation to find the optimum polymer for use in a hair care product. The affidavit include(s) statements which amount to an affirmation that the claimed subject matter functions as it was intended to function. This is not relevant to the issue of nonobviousness of the claimed subject matter and provides no objective evidence thereof. See MPEP § 716. It is noted by the examiner that applicants do not appear to state that the results are unexpected only that dimethacrylamide polymer is advantages over acrylamide polymer. While it may not be relevant the examiner notes that the formulation of polymer 2 includes an additional ingredient C10-C11 isoparaffin, which may mean applicants are not comparing the same formulations. Lastly the examiner notes that the

examples provided by applicants are clearly much narrower in scope than the claimed subject matter of the invention. For instance the formulation is a hair product with numerous specific ingredients, the formulation of applicant's claims can be any cosmetic containing an oil and aqueous phase with the claimed polymer as the only recited ingredient. The affidavit therefore refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 and 11-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1, from which all the currently pending claims depend upon, has no support in the specification for the new limitation that the copolymer "which is essentially 100wt% components a) b) and c), nor have applicants led the examiner to where such support could be found. Furthermore for claims 18-19 the examiner could not find support for the new limitation that the

copolymer consists essentially of 20 wt% of formula I and about 80% of formula II. This new rejection was necessitated by applicant amendments to the claims.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galleguillos et al. (US 6,361,768 B1), for the reasons set forth in the previous office action filed 02/01/2010. New claims 18-19 are rejected due to amendment.

Regarding new claims 18-19 as noted in the previous office action finding the optimum amount of each monomer component used in a copolymer is routine and obvious optimization, therefore the amounts claimed are not patentable in view of the prior art.

Response to Arguments

Applicant's arguments filed 07/14/2010 have been fully considered but they are not persuasive.

Applicants believe Galleguillos is now excluded because the reference uses anionic monomers and applicant's claims now state that the copolymer is essentially 100wt% components a) b) and c).

The examiner notes that that the modifier "essentially" broadens the scope of the limitation to include small amounts of other ingredients. While the limitation clearly recites that most of the polymer contains components a) b) and c), the claim limitation is not seen as excluding small proportions of other ingredients, for instance a fourth

monomer present in amounts up to 10%. The examiner interpreted **essentially** 100 wt% in a similar manner to **about** 100 wt%, in other words the amount of monomers a) b) and c) is near 100% but does not have to be exactly 100 wt%. Galleguillos anionic monomer is present in amounts as small as 0.5% and the reference exemplified the anionic monomer methacrylic acid in amounts as small as 2.7%. See claims and example 5. Thus the examiner has good reason to believe that applicants new limitation does not remove the Galleguillos rejection since the prior art used anionic monomers in such small amounts. Therefore Galleguillos is not excluded by the limitation that the copolymer is essentially 100 wt% components a) b) and c). If applicants wish to only claim a polymer that consists of only monomers a) b) and c), then the examiner suggest deleting the recitation that the copolymer is "essentially 100wt% components a) b) and c)" and amend the claims, if there is support in the specification, to state the copolymer consists of components a) b) and c). The suggested amendment has not been considered by the examiner for new matter or in regards to the prior art.

Claims 1-9 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6,365,656) in view of Galleguillos et al. (US 6,361,768 B1) in view of Lentini et al. (US 5,665,368), for the reasons set forth in the previous office action filed 02/01/2010.

Regarding new claims 18-19 as noted in the previous office action finding the optimum amount of each monomer component used in a copolymer is routine and

obvious optimization, therefore the amounts claimed are not patentable in view of the prior art.

Response to Arguments

Applicant's arguments filed 07/14/2010 have been fully considered but they are not persuasive.

Applicants assert that since Galleguillos, the secondary reference uses anionic monomers, such monomers must be added to the combination of references. Thus as in the above argument over Galleguillos applicants believe the copolymer made would not read on their claimed invention.

Galleguillos was only used as a secondary reference for its disclosure on the nonionic monomer N,N-dimethyl acrylamide and not for its entire disclosure on other monomers that were useful in the polymer used in personal care compositions. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore as noted above the small amount of anionic monomer of N,N-dimethyl acrylamide of Galleguillos would not seem to be excluded by the new limitation for components a, b and c being essentially 100 wt% of the copolymer.

Applicants further argue that acrylamide and dimethacrylamide are not equivalent to each other. Applicants provide evidence by US CIR expert panel that states only small amounts of acrylamide should be used in cosmetics. Applicants further argue that

the declaration shows the monomers are non-equivalent because they each have different conditioning properties in the hair care formulation in that dimethacrylamide provided greater deposition on hair follicles than polymer 1.

The response to the declaration is noted above. The examiner does not find applicants argument that acrylamide and dimethacrylamide are not equivalent as persuasive. Structurally acrylamide and dimethacrylamide differ only in that dimethacrylamide contains two methyl groups on the nitrogen as opposed to acrylamide which contains two hydrogen atoms on nitrogen. Since the monomers differ only in N-substituted methyls verses N-substituted hydrogen the examiner concluded that the two compounds are structural analogs. Since the compounds are so close structurally and Green and Galleguillos describe their use as non-ionic monomer components in ionic copolymers useful in cosmetic formulations one of ordinary skill in the art would have a very high expectation of success in substituting one monomer for the other. The examiners position is also supported in the case law because hydrogen and methyl are deemed obvious variants. See *In re Wood*, 199 USPQ 137. Analogs differing only in the substitution of hydrogen with methyl or longer alkyl, are *prima facie* obvious, and require no secondary teaching. (*Ex parte Bluestone*, 135 USPQ 199) It would be routine for the chemist to insert a methyl group in order to increase lipophilicity. The experienced chemist, who would make applicants' compounds, would be motivated to prepare these compounds on the expectation that structurally similar compounds would possess similar properties and because it is routine nature to perform such experimentation in the art of cosmetic chemistry.

Conclusion

No claims are allowed at this time.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 271-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. W. R./

Examiner, Art Unit 1618

/Michael G. Hartley/

Supervisory Patent Examiner, Art Unit 1618